

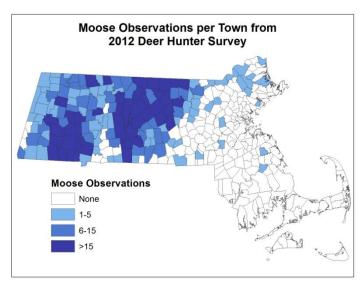
Massachusetts Division of Fisheries & Wildlife

Moose Alces americanus

State Status: **None** Federal Status: **None**

SPECIES DESCRIPTION: Moose are the largest extant member of the deer family. *Alces americanus*, also known as the Eastern Moose, is the species found in Massachusetts. Moose are dark brown with lighter-colored legs, high-humped shoulders, and males have a distinctive flap of skin protruding beneath the lower jaw. Adult Moose weights range from 360 to 600 kg for males and 200 to 360 kg for females. Moose are about 280 cm in length and stand 140 to 200 cm tall at the shoulder.

DISTRIBUTION AND ABUNDANCE: Moose have recently reclaimed most of their historic range in Massachusetts. Population and range expansion peaked around 2004, and the population currently appears stable. The Moose density in Massachusetts is very low in comparison to more northern states like Maine, New Hampshire, and Vermont. Future trends are difficult to predict, but Moose trends in nearby states are declining. Moose are mostly found in areas of western and central Massachusetts, with occasional sightings in eastern towns.



Moose observations per town in Massachusetts; collected from the 2012 Online Hunter Survey.



Photo by Bill Byrne, MassWildlife

HABITAT DESCRIPTION: Moose use a mosaic of habitats for both food and protection, including conifer cover, regenerating forest, and wetlands. There are seasonal differences in the food intake of Moose, but they seek highly nutritious, low-toxin foliage and browse. Early successional forests provide important foraging habitat for the Moose throughout the year, while submerged aquatic vegetation can be utilized during the summer months. Dense conifer stands provide thermal cover during the clear and cold winter months, but are also used to escape the heat.

THREATS: In Massachusetts, Moose are at the southern end of the historic range in northern hardwood and eastern broadleaf forest types. Recent research on specific habitat requirements for Moose in Massachusetts showed that Moose use areas with a mixture of habitat types and forest ages, and can rely on areas of higher elevation to escape the heat. Major threats include removal of habitat (e.g., development), vehicle collisions, and parasites (brain worm and winter tick). Climate change may also pose challenges for Moose in Massachusetts, especially if it leads to greater parasite abundance.

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

REFERENCES

- Geist, V. 1998. Moose. Pages 223-254 in Deer of the World, Their Evolution, Behavior, and Ecology. Stackpole Books, Mechanicsburg, Pennsylvania.
- Karns, P.D. 1997. Population Density and Trends. Pages 125-140 *in_F.W.* Franzmann and C.C. Schwartz (eds.), *Ecology and Management of the North American Moose*. Smithsonian Institution Press, Washington and London.
- McDonald, J.E. 2000. The moose question. *Massachusetts Wildlife*. 50: 24-35.
- Vecellio, G.M., R D. Deblinger, and J.E. Cardoza. 1993. Status and management of moose in Massachusetts. *Alces* 29: 1-7.
- Wattles, D.W. 2011. Status, movements and habitat use of Moose in Massachusetts. M.S. thesis, University of Massachusetts, Amherst, Massachusetts.
- Wattles, D.W. 2014. The effect of thermoregulation and roads on the movements and habitat selection of Moose in Massachusetts. Doctoral dissertation, University of Massachusetts, Amherst, Massachusetts.
- Wattles, D.W., and S. DeStefano. 2013. Space use and movements of Moose in Massachusetts: implications for conservation of large mammals in a fragmented environment. *Alces* 49: 65-81.

For more information on Moose in Massachusetts, see: http://www.mass.gov/eea/agencies/dfg/dfw/fish-wildlife-plants/mammals/moose-in-mass-generic.html